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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,542	07/30/2003	Se Hwan Kim	HI-0160	6510

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EXAMINER
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CHOW, DOON Y

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/629,542	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> Dennis-Doon Chow	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The original specification does not provide support for "a main module configured to be rotatably connected to the display module" as is now claimed in claim 23.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 8, 9, 13, 14, 16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoye (5969696) and Applicant's Admitted Prior Art (AAPA).

Regarding to claims 1, and 21-22, Stoye discloses a computer system, comprising: generating means for generating sense signals 53 for identifying vendor display type of an installed display (col. 2, lines 30-43); and brightness control means for matching brightness control information corresponding to the vendor display type of the installed display among preset brightness control information for each of the plurality of display types, wherein the brightness control information is used to control the brightness of the installed display (col. 2, lines 44-62). Stoye does not explicitly disclose the checking means. However, the generating means as disclosed is equivalent the checking means because both the generating means and the checking means generate the same identifying function.

Stoye fails disclose an inverter for providing a driving current to control the brightness of the display.

AAPA, in same the display field, discloses the use of an inverter for providing a driving current to control the brightness of a display device (see page 2, paragraph 4).

In light of AAPA, it would have been obvious to one of ordinary skill in the art to use an inverter in Stoye's system to provide a driving current to control the brightness of the display because Stoye does not teach using any specific method for control the brightness of the display.

Regarding to claim 2, the above disclosures of claim 1 applied here as well. The checking means checks inherent control information of at least one of the display. Stoye further discloses output means for outputting a brightness control information corresponding to a inherent control information of at least one display among preset

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brightness control information for each of the plurality of displays to output information to control brightness of the at least one display; and conversion means for supplying an information to drive the at least one display based on the output information of the output means (col. 2, lines 30-62).

Regarding to claim 8, Stoye disclose decoding the sense signals (inherent control information) of a display intended to use (col. 2, lines 44-55), retrieving the brightness control information corresponding to the display among one or more prescribed brightness control information (col. 2, lines 30-62), and variably controlling the brightness of the corresponding display by using the retrieved brightness control information (col. 2, lines 30-62).

Regarding to claim 9, Stoye inherently discloses the one or more brightness control information is stored in advance to correspond to the inherent control Information of the displays because the system is self-configurable.

Regarding to claim 13, the above disclosures of claim 1 applied here as well. The computer system inherently comprises a system BIOS and a memory for storing brightness control values.

Regarding to claim 14, the computer system inherently comprises a memory for strong brightness information and one or more correcting coefficients for respective displays because the system is self-configurable.

Regarding to claims 16 and 18-19, the above disclosures of claims 8 and 14 applied here as well.

Regarding to claim 20, Stoye discloses the specific brightness control

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Information is for a generalized display type or generic display type, and wherein the displays are LCDs.

Regarding to claim 23, Stoye further discloses a display module configured with the display device and a single inverter, and a main module configured to be rotatably connected (hinged connector 60, col. 2, lines 13-23) to the display module, wherein the installable display types comprise a plurality of various vendor display types.

5. Claims 3, 4, 7, 10, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoye as applied to claims 1, 2, 8, 9, 13, 14, 16 and 18-23 above, and further in view of Lee et al. (5854617).

The disclosures of the above claims applied here as well.

Stoye does not disclose identifying power modes, and outputting signals corresponding to the identified power modes.

Lee, in the same display field, discloses a display device comprising an AC adapter mode and a battery mode (see Fig. 2), means for identifying the power modes, and means for outputting signal corresponding to the identified power modes to control the brightness of a display screen.

It would have been obvious to use Lee's concept in Stoye's invention so that the brightness of the display can be properly adjusted when a different power source is used.

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6. Claims 5, 6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoye in view of Lee et al. as applied to claims 3, 4, 7, 10, 15, and 17 above, and further in view of Terasaki (58445400).

Regarding to claims 5 and 11-12, the modified Stoye does not disclose outputting a PWM signal to adjust the brightness of the display.

Terasaki, in the same display field, discloses a display device comprising a circuit means for generating and outputting a PWM signal to adjust the brightness of a display.

In light of Terasaki, it would have been obvious to one of ordinary skill in the art to use Lee circuit means in the system of the modified Stoye to output a PWM signal for adjusting the brightness of the display. This would have been obvious because modulating a pulse width of a signal is one of conventional ways to adjust the brightness of a display.

Regarding to claim 6, it is considered a matter of obvious choice to form the memory means, the output means and input means-control means on a single chip because it is not regarded as inventive to merely make these elements integral.

### ***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 571-272-7767. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.




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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Chow  
April 27, 2006

Dennis-Doon Chow  
Primary Examiner  
Art Unit 2629



DENNIS-DOON CHOW  
PRIMARY EXAMINER